CITY OF RICHMOND
DEPARTMENT OF PUBLIC UTILITIES
FINANCIAL OPERATIONS DIVISION

1 December 2009

Mr. Richard Weeks
Regional Director
Piedmont Regional Office
Department of Environmental Quality
4949-A Cox Road
Glen Allen, Virginia 23060

Re: City of Richmond Virginia Special Order by Consent and VPDES Permit VA0063177, 2009 Compliance and Progress Report

Dear Mr. Weeks:

In compliance with SECTION A.4 of the STATE WATER CONTROL BOARD ENFORCEMENT ACTION SPECIAL ORDER BY CONSENT (Order) ISSUED TO THE CITY OF RICHMOND, Permit No. VA0063177, effective 17 March 2005, please accept this Compliance and Progress Report (Report) describing progress made in the previous fiscal year in controlling Combined Sewer Overflows (CSOs) and plans for further implementation of the Long Term Control Plan (LTCP) in the near and long term future. This Report contains all the elements required in SECTION A.4. listed in the Order as follows:

"1. An independent rate consultant report that includes schedules and other material designed to demonstrate compliance with the above funding and spending criteria. At a minimum, the independent rate consultant's report will include:

- ***a. A schedule of sewer rates and charges in effect during the year and an explanation of any changes in the sewer rates and charges during the year;***
- ***b. A schedule that calculates the current year annual sewer bill for a residential customer with a 7 ccf average monthly sewer use and the percentage of such bill to median household income in the City;***
- ***c. A schedule detailing sewer related revenues, operation and maintenance expenses, net revenues, debt service, reserve funds and the sewer debt service coverage ratio for the previous year;***

d. A schedule detailing amounts borrowed, grants, and other sources of capital funds, and the amount of capital funds obligated for water quality projects during the previous year; and,

e. A schedule displaying the industrial rate structure and progress toward the goal of parity between industrial and residential rates.

2. An accounting of all sums expended on implementation of specific CSO projects contained in the LTCP in the previous fiscal year and in each fiscal year since the effective date of this Order.

3. An accounting of all sums obligated in the current fiscal year, and funds projected to be obligated within the next five years for implementation of specific CSO projects contained in the LTCP.

4. A narrative report of the status of each CSO project identified in the LTCP including projected completion dates contingent upon funding availability.

5. A status report of progress being made in procuring state and federal grants and low interest loans for the purpose of implementing specific elements of the LTCP."

COMPLIANCE STATEMENT

Based on information referenced in Attachment No. 1 (Exhibits 1 through 3) of this Report, we confirm to you the following:

1. Effective July 1, 2009, the sewer rates and charges were adjusted in accordance with Section A.1 of Appendix A to the CSO Special Order dated March 17, 2005. See Exhibit 1 for a summary of the sewer rate changes for the most recent five year period.
2. As of July 1, 2009, the annual sewer bill for residential customers with 7 ccf of average monthly sewer use was 1.33% of MHI for the City of Richmond. See Exhibit 2 for details. The Order requires the City to increase sewer rates such that the annual sewer bill for a typical residential customer with 7 ccf of average monthly sewer use will be at least 1.25% of MHI by March 17, 2010. As shown on Exhibit 1, rate increases over the last four years have averaged 5.5% during a period when the Consumer Price Index (CPI) has averaged 2.5% per year. Sewer rates for residential customers were less than rates charged to Commercial and Industrial customers. See Exhibit 1 for details.
3. For the year ended June 30, 2009, the debt coverage ratio in the City's Sewer Fund was 1.41 compared with the 1.75 maximum limit stipulated in the Special Order. See Exhibit 3 for details.

4. During the year ended June 30, 2009, the City obtained the following capital funds that were used for CSO and water quality project appropriations.

Revenue bonds	$21,100,966
Grants/Construction-in-Aid funds	5,757,485
Working capital transfers	3,722,659
Total	$30,581,110

Attachments No. 2 through No. 4 provides a status report on information required by the Order in Sections A.4.2. through A.4.5. Attachment No. 3 does not include the City of Richmond's flood wall operating costs.

As required by the Order, the City agrees to meet with the Department in December, 2005, and every December thereafter, to discuss the status of the CSO projects required under this Order. By way of this letter, the City requests such a meeting with the Department. Please contact this office to schedule the meeting at a mutually convenient date and time.

Sincerely,

Christopher Beschler
Deputy Chief Administrative Officer
Director Department of Public Utilities

c: Robert C. Steidel, Deputy Director, City of Richmond – DPU
Wayne Lassiter, Utilities Comptroller, City of Richmond - DPU
Walter Gills, Program Director, DEQ - Headquarters
Virginia Kelly, DEQ – PRO, Senior Environmental Engineer
Frank Lupini, DEQ – PRO, Senior Enforcement Specialist
Gregory O'Halloran, City of Richmond
Federico Maisch, Greeley and Hansen
File

Attachments

Attachment No. 1
(SECTION A.4.1.) An independent rate consultant report and Exhibit 1, Exhibit 1a, Exhibit 1b , Exhibit 2 and Exhibit 3.

Attachment No. 2
(SECTION A.4.2.) An accounting of all sums expended on implementation of specific CSO projects contained in the LTCP in the previous fiscal year and in each fiscal year since 17 March 2005 and, Exhibit 4.1 and Exhibit 4.2.

Attachment No. 3
(SECTION A.4.3.) An accounting of all sums obligated in the current fiscal year, and funds projected to be obligated within the next five years for implementation of specific CSO projects contained in the LTCP and Exhibit 5.

Attachment No. 4
(SECTION A.4.4. and SECTION A.4.5.) A narrative report of the status of each CSO project identified in the LTCP including projected completion dates contingent upon funding availability and a status report of progress being made in procuring state and federal grants and low interest loans for the purpose of implementing specific elements of the LTCP.

KPMG LLP
Suite 2000
1021 East Cary Street
Richmond, VA 23219-4023

Independent Accountants' Report on Applying Agreed-Upon Procedures

Chief Administrative Officer
City of Richmond, Virginia:

We have performed the procedures enumerated below, as promulgated in the Commonwealth of Virginia Department of Environmental Quality's (DEQ) Consent Order, *Section A.4.1*, solely to assist in evaluating the financial data that the City's DEQ Compliance Letter (the Letter) specifies as having been derived from the City of Richmond, Virginia (City) Department of Public Utilities (DPU) financial records. This agreed-upon procedures engagement was performed in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of these procedures is solely the responsibility of the specified users of this report. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

As requested, we have performed the following agreed-upon procedures:

- With respect to the amounts included in Exhibits 1 and 1a of the Letter, we agreed the rate amounts per the exhibits for each year to the related City Ordinances. Additionally, for all years presented, the residential customers' rates were less than the commercial and industrial customers' rates.
- With respect to the amounts included in Exhibit 2 of the Letter, we performed the following:
  - Agreed the effective rate and monthly service charge per the exhibit to the related City Ordinances;
  - Agreed the 2000 MHI amount per the exhibit to the United States Census Bureau's Summary Social, Economic, and Housing Characteristics report Table 13 – Household Income, and the CPI index percentage per the exhibit to the United States Department of Labor Bureau of Labor Statistics Consumer Price Index – All Urban Consumers – U.S. City Average report; and
  - Re-performed the calculations and footed the amounts per the exhibit and found them to be mathematically accurate.
- With respect to amounts included in Exhibit 3 of the Letter, we performed the following:
  - Agreed all respective revenue amounts listed per the exhibit to the City Department of Public Utilities' (DPU) reconciliation to the Comprehensive Annual Financial Report (CAFR) for each fiscal year presented;
  - Agreed all respective expense amounts per the exhibit to the DPU's reconciliation to the City's CAFR for each fiscal year presented;
  - Agreed the respective debt service amounts per the exhibit to the City's general ledger for each fiscal year; and

- Recalculated the respective revenue bond amounts, added to the debt service balance, per the exhibit, as 115% of the City's total revenue bonds outstanding at each fiscal year ended, as required by the DEQ Consent Order.

- With respect to amounts included in item 5 of the "Compliance Sheet" section of the Letter, we performed the following:
  - Agreed the "Grants/Construction-In-Aid funds" to the City's CAFR for June 30, 2009; and
  - Agreed the total balance noted ($30,581,110) to Exhibit 4.2 and recalculated the "Revenue Bonds" amount based on DPU's 69% of the total balance allocation and agreed the components of the allocation percentage to DPU's "Six-year Forecast." Recalculated the "Working Capital Transfer" balance as the difference between the total amount and the amounts for "Revenue Bonds" and "Grants/Construction-In-Aid."

* * * * * *

We were not engaged to, and did not perform an audit, the objective of which would be the expression of an opinion on the specified elements, accounts, or items. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you. This report relates only to the items specified above and does not extend to any other items or financial statements of the City, taken as a whole.

This report is intended solely for the information and use of City management and the Virginia Department of Environmental Quality, and is not intended to be and should not be used by anyone other than these specified parties.

KPMG LLP

November 25, 2009

COMPLIANCE

Based on the information included in Exhibits 1 through 3 of this report, we confirm to you the following:

1. Effective July 1, 2009, the sewer rates and charges were adjusted in accordance with Section A.1 of Appendix A to the CSO Special Order dated March 17, 2005. See Exhibit 1 for a summary of the sewer rate changes for the most recent five year period.

2. As of July 1, 2009, the annual sewer bill for residential customers with 7 Ccf of average monthly sewer use was 1.33% of MHI for the City of Richmond. See Exhibit 2 for details. The Special Order requires the City to increase sewer rates such that the annual sewer bill for a typical residential customer with 7 Ccf of average monthly sewer use will be at least 1.25% of MHI by March 17, 2010. As shown on Exhibit 1, rate increases over the last four years have averaged 5.5% during a period when the Consumer Price Index (CPI) has averaged 2.5% per year.

3. Sewer rates for residential customers were less than rates charged to Commercial and Industrial customers. See Exhibit 1 for details.

4. For the year ended June 30, 2009, the debt coverage ratio in the City's Sewer Fund was 1.41 compared with the 1.75 maximum limit stipulated in the Special Order. See Exhibit 3 for details.

5. During the year ended June 30, 2009, the City obtained the following capital funds that were used for CSO and water quality project appropriations.

Revenue bonds	21,100,966
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Total	$30,581,110

WASTEWATER CHARGES FOR SERVICES

Per Section A.4. Requirement 1.a.
See Explanatory notes on Exhibit 1b

	7/1/2005	7/1/2006	7/1/2007	7/1/2008	7/1/2009
Volume Charge - Residential	$1.597	$1.684	$1.777	$2.455	$2.582
Volume Charge - Commercial	2.163	2.282	2.407	2.982	3.315
Volume Charge - Industrial	2.185	2.305	2.432	3.006	3.393
Volume Charge - Municipal	2.090	2.205	2.326	2.969	3.143
Monthly Service Charge (5/8" Meter)	24.49	25.84	27.26	24.82	26.11
Private Water Supply (non-meter)	34.69	36.59	38.61	40.73	42.97
Strong Wastewater Charge (275 mg/l)	22.856	24.113	25.439	20.080	20.890
Strong Wastewater Charge (250 mg/l)	19.745	20.831	21.977	24.542	25.630

Exhibit 1

WASTEWATER CHARGES FOR SERVICES

Per Section A.4. Requirement 1.a.
See Explanatory notes on Exhibit 1b

	7/1/2005	7/1/2006	7/1/2007	7/1/2008	7/1/2009
Commercial and Industrial Wastewater Rates					
Monthly Service Charge (5/8" Meter)	$24.49	$25.84	$27.26	$24.82	$26.11
Monthly Service Charge (3/4" Meter)	$36.66	$38.67	$40.80	$37.23	$39.17
Monthly Service Charge (1" Meter)	$61.21	$64.58	$68.13	$62.07	$65.29
Monthly Service Charge (1-1/2" Meter)	$134.72	$142.13	$149.95	$134.05	$138.40
Monthly Service Charge (2" Meter)	$244.74	$258.20	$272.40	$238.30	$240.26
Monthly Service Charge (3" Meter)	$563.05	$594.02	$626.69	$531.22	$517.06
Monthly Service Charge (4" Meter)	$1,003.65	$1,058.85	$1,117.09	$938.33	$903.56
Monthly Service Charge (6" Meter)	$2,252.01	$2,375.87	$2,506.54	$2,072.77	$1,961.20
Monthly Service Charge (8" Meter)	$4,039.08	$4,261.23	$4,495.60	$3,671.39	$3,418.38
Monthly Service Charge (10" Meter)	$6,242.28	$6,585.61	$6,947.82	$5,629.95	$5,194.16
Volume Charge (Commercial)	2.163	2.282	2.407	2.982	3.315
Volume Charge (Industrial)	2.185	2.305	2.432	3.006	3.393

WASTEWATER RATE HISTORY

Explanation of Rates

1. **Sewer use is typically billed at the appropriate volume rate. Generally usage is based on metered water consumption. In cases where the customer uses a private water supply, a flat rate is charged for sewer services.**

2. **In addition to charges for usage, customers are charged a capacity charge that is dependent on the size of the meter that is required to service the customer. Meters range from 5/8 inch to 10 inches in diameter and service charges vary from $26.11 to $5,194.16 per month.**

3a. **Strong wastewater charges (275mg/l) are to cover treatment costs when wastes, containing concentrations of suspended solids that exceed 275 milligrams per liter, are discharged into the City's wastewater system.**

3b. **Strong wastewater charges (250mg/l) are to cover treatment costs when wastes, containing concentrations of BOD (Biochemical Oxygen Demand) that exceed of 250 milligrams per liter, are discharged into the City's wastewater system.**

Exhibit 1b

ANNUAL WASTEWATER BILL AS A PERCENT OF MHI

Per Section A.4. Requirement 1.b.

ANNUAL RESIDENTIAL WASTEWATER BILL:		7/1/2009
Effective rate @ 7 ccf		$2.582
Average monthly use in ccf	x	7
Volume charge		18.07
Monthly service charge		26.11
Total monthly wastewater bill		44.18
	x	12
Annual wastewater bill		$530.21

MEDIAN HOUSEHOLD INCOME (MHI) CALCULATION		
2000 MHI per U.S.Census Bureau		$31,121
CPI index from Dec 1999 to Jul 2009 (215.4/168.3)	x	1.280
2009 estimated MHI		$39,830

ANNUAL WASTEWATER BILL AS A % OF MHI	1.33%

Notes:

1. CPI data from US Department of Labor:
   December 1999 Index = 168.3
   July 2009 Index = 215.4

Exhibit 2

DEBT SERVICE COVERAGE

Per Section A.4. Requirement 1.c.

	Fiscal Year 2005	Fiscal Year 2006	Fiscal Year 2007	Fiscal Year 2008	Fiscal Year 2009
REVENUES:					
Operating Revenues	47,902,946	50,789,214	53,236,155	56,159,635	58,310,112
Reimbursement of Storm Related Costs	0	0	3,690,754	2,239,314	319,884
Interest Income	478,138	1,405,822	1,567,643	2,231,905	2,644,658
Total Revenues	48,381,084	52,195,036	58,494,552	60,630,854	61,274,654
OPERATING & NON-OPERATING EXPENSES					
Operating Expenses	4,228,840	7,142,435	7,447,551	9,510,043	12,019,862
DIT	1,216,597	222,790	219,887	137,283	162,665
Contractors	3,375,888	2,704,087	3,436,433	2,335,496	1,543,878
Salaries & Wages	6,733,993	6,837,594	7,049,211	7,151,420	8,222,183
Materials & Supplies	762,002	677,164	769,876	1,022,229	1,170,506
Rents & Utilities	2,107,497	2,258,246	2,094,533	3,625,003	4,110,882
Maintenance & Repairs	3,931,082	5,116,871	10,130,123	7,145,205	4,300,730
Taxes & Licenses	6,502,934	6,863,942	6,366,667	7,159,166	6,675,439
Total Operating & Non-Operating Expenses	28,858,834	31,823,129	37,514,281	38,085,845	38,206,144
NET REVENUES	19,522,250	20,371,907	20,980,271	22,545,009	23,068,509
DEBT SERVICE					
General Obligation Bonds (100%)	6,129,644	5,537,455	4,712,043	4,877,663	5,009,999
Revenue Bonds (115%)	9,153,359	9,216,629	9,425,119	12,432,645	11,297,913
Total Debt Service	15,283,003	14,754,084	14,137,162	17,310,308	16,307,913
DEBT COVERAGE	1.28	1.38	1.48	1.30	1.41

Exhibit 3

PROJECT APPROPRIATIONS

Projects are normally appropriated at the beginning of each fiscal year when the City's Capital Improvement Program (CIP) is approved by the City Council. City staff is authorized to expend money on individual projects after project construction bids are received and approved. Since July 1, 2000, the City has expended, authorized and appropriated $490,210,051 for CSO and other water quality projects. A summary of these amounts is shown below:

	CSO	Water Quality	Total
Prior to FY 2004 Expenditures	124,009,599	62,809,749	186,819,348
FY 2005 Expenditures	1,621,858	9,462,920	11,084,778
FY 2006 Expenditures	625,047	15,831,408	16,456,455
FY 2007 Expenditures	928,670	21,949,678	22,878,348
FY 2008 Expenditures	2,415,262	33,035,113	35,450,375
FY 2009 Expenditures	4,203,990	26,377,120	30,581,110
Unexpended Authorizations	21,442,439	94,814,199	116,256,637
Appropriations to be Authorized	10,069,000	60,614,000	70,683,000
Totals	$165,315,865	$324,894,187	$490,210,051

Exhibit 4 contains an itemization of project expenditures and unexpended authorizations from July 1, 2000 to June 30, 2009. Unexpended authorizations represent the remaining budgets on projects under construction at June 30, 2009. Appropriations to be authorized represent approved CIP amounts that have not been authorized for specific projects at June 30, 2009. This occurs because project bids cannot always be received and approved in the same year that projects are appropriated.

PROJECT EXPENDITURES

1. CSO Projects Authorized

Per Section A.4. Requirement 2.

Project Description	Prior to FY 04 Expenditures	FY 04 Expenditures	FY 05 Expenditures	FY 06 Expenditures	FY 07 Expenditures	FY 08 Expenditures	FY 09 Expenditures	Cumulative Expenditures	Unexpended Amount
CSO 4&5 - Hampton Street Retention Tunnel	$48,566,774	$1,880,509	$1,533,202	$134,785	$0	($552,080)	$0	$51,563,190	($63,190)
Swirl Concentrators	$1,336,398	0	43,200	43,200	43,200	0	290,807	$1,756,805	83,195
Shockoe Retention System	$1,351,600	0	45,456	48,055	219,138	24,586	3,260,751	$4,949,586	9,150,414
James River Monitoring	$1,692,302	59,251	0	0	0	0	7,110	$1,758,663	(358,663)
CSO Re-Evaluation Study	$678,511	43,212	0	0	0	0	(71,967)	$649,756	825,244
CSO Phase III - PPP	$0	0	0	162,790	663,333	2,544	0	$828,667	176,333
CSO Phase III - 1 Regulators 24,25,26	$0	0	0	0	0	2,556,914	532,697	$3,089,611	1,318,389
CSO Phase III - 2 Separation Design Fulton Bottom	$0	0	0	20,767	0	4,861	1,643	$27,271	1,597,729
CSO Phase III - 2 Separation Design Maury Street	$0	0	0	39,791	0	51,175	1,333	$92,299	2,157,701
CSO Phase III - 2 Separation Design Orleans & Nicholson Sts	$0	0	0	39,790	0	30,197	0	$69,987	1,730,013
CSO Phase III - 3 Regulators Design 12,14,39	$0	0	0	75,515	0	89,006	49,818	$214,339	704,661
CSO Phase III - 4 Lower Gillies Creek Design	$0	0	0	0	0	98,475	59,439	$157,914	3,199,086
CSO Phase III - 5 Oakwood In-Line Equalization	$0	0	0	60,354	0	54,360	13,542	$128,256	371,744
Shockoe Diversion Structure & Miscellaneous Improvements	0	0	0	0	0	55,224	58,818	$114,042	2,208,958
Total CSO Projects	$53,625,585	$1,982,972	$1,621,858	$625,047	$925,671	$2,415,262	$4,203,990	$65,400,385	$23,101,615
Projects Authorized prior to 07/01/2000	$68,401,098	(56)	0	0	2,999	0	0	68,404,041	(1,659,176)
	$122,026,683	$1,982,916	$1,621,858	$625,047	$928,670	$2,415,262	$4,203,990	$133,804,426	$21,442,439

PROJECT EXPENDITURES

2. Other Water Quality Projects Authorized
Per Section A.4. Requirement 2.

Project Description	Prior to FY 04 Expenditures	FY 04 Expenditures	FY 05 Expenditures	FY 06 Expenditures	FY 07 Expenditures	FY 08 Expenditures	FY 09 Expenditures	Cumulative Expenditures	Unexpended Amount
Lift Stations Upgrade	$299,536	$34,800	$467,670	$12,118	$0	$0	$0	$814,124	$36,876
Secondary Grit Removal	$78,038	0	0	0	0	0	0	$78,038	(23,038)
Replace VFD's-Main/Supplemental Pumping	$302	1,488,196	331,756	63,302	52,564	0	0	$1,936,120	(311,120)
Miscellaneous Treatment Plant Upgrades	$140,948	285,073	155,120	0	0	(5,115)	0	$576,026	95,859
Main Pump Station Replacements	$0	119,654	77,855	133,192	9,229	0	0	$339,930	260,070
Blower Switchgear/DC System Replacements	$5,722	97,867	161,460	678,536	357,358	0	0	$1,300,943	99,057
Master Plans & Floodwall Study	$851,441	363,918	50,514	35,082	35,082	0	0	$1,336,037	1,308,000
Plant Projects Consolidation	$432,350	416,735	364,684	89,625	36,736	0	0	$1,340,130	(118,130)
Chlorine Slide Gate Replacements #2 thru #6	$0	5,910	1,603	190,017	5,810	64,779	0	$268,119	171,881
Reliability & Upgrade of Sewer Crossing	$0	79,312	0	0	0	0	0	$79,312	169,688
Primary Sedimentation Facility Improvements	$0	227,324	105,146	3,079,210	2,564,208	1,148,835	0	$7,124,723	3,669,277
Final Sedimentation Facility Improvements	$0	150,240	107,672	3,452,107	2,864,944	1,265,596	0	$7,840,559	663,441
Security Enhancements	$0	0	143,996	11,019	0	0	273,770	$428,785	1,021,215
Scum Study	$0	30,034	20,442	13,672	29,088	0	0	$93,236	(36,236)
Grit Study	$0	36,298	17,450	6,193	0	0	0	$59,941	(2,941)
Upgrade Sludge Thickening - Tanks & Gallery Ph. 1	$0	0	0	0	20,961	196,185	1,766,740	$1,983,886	1,148,114
Electrical Coordination Study	$0	0	0	0	0	0	0	$0	22,000
Structural/Mechanical Dewatering Assessment	$0	0	0	0	0	0	0	$0	83,000
Alternative Power/Energy	$0	0	0	0	0	0	0	$0	0
WWTP Alternate Disinfection	$0	0	0	0	0	0	0	$0	0
Motor Management Relay	$0	0	0	0	0	0	0	$0	145,000
WWTP Biological Nutrient Removal Basis of Design	$0	140,678	58,673	0	4,106	0	(4,106)	$199,351	320,649
Odor Control Basis of Design	$0	0	0	8,713	0	0	0	$8,713	16,287
Database Intergration	$0	0	0	0	16,492	32,581	37,858	$86,931	263,069
Maury Street Septage Hauler Station	$0	0	0	0	0	0	0	$0	0
Hospital Street Septage Hauler Station	$0	0	0	0	0	0	0	$0	251,000
Administration Building HVAC	$0	0	0	0	0	94,724	13,078	$107,802	698,000
Interim Chlorination/Dechlorination	$0	0	0	20,912	0	0	0	$20,912	1,640,088
Flood Protection Sealing	$0	0	0	0	0	0	0	$0	121,000
Main Switchgear Improvements	$0	0	0	0	0	0	0	$0	762,000
MIS Phase III	$0	0	0	0	0	54,407	208,451	$262,858	1,030,142
WWTP Biological Nutrient Removal Phase I	$0	0	0	0	0	2,397,415	3,705,696	$6,103,111	49,022,889
Annual Sanitary Sewer Rehabilitation (City Wide)	$12,834,367	7,559,931	5,114,800	5,077,586	4,340,062	2,950,966	10,623,363	$48,501,075	13,469,637
Annual Sanitary Sewer Emergency Repairs (City Wide)	$1,148,882	1,148,208	529,686	949,020	215,287	1,016,279	3,006,417	$8,013,779	(1,847,417)
Sanitary Sewer Ancillary Projects (City Wide)	$0	233,985	1,754,393	708,410	174,136	1,762	129,877	$3,002,563	1,556,123
Sixth Street Sewer Repair Project	$0	0	0	1,000,000	0	0	0	$1,000,000	0
Lady Bird Hat Company Sewer Relocation	$0	0	0	302,694	0	0	0	$302,694	(52,694)
WWTP Shockoe Bottom Drainage Projects SBD 1thru 7	$0	0	0	0	1,343,249	3,881,021	5,649,404	$10,873,674	9,126,326
WWTP Battery Park Drainage Projects/TS Ernesto	$0	0	0	0	9,880,366	19,935,678	958,869	$30,774,913	7,225,087
WWTP Dry Weather Flow Regulators	$0	0	0	0	0	0	0	$0	470,000
WWTP Trunk and Interceptor Sewer Inspection & Repair	$0	0	0	0	0	0	0	$0	2,000,000
WWTP Outfall Tide Gate Inspection and Repair	$0	0	0	0	0	0	7,702	$7,702	340,000
Total Water Quality Projects Expenditures	$15,791,586	$12,418,163	$9,462,920	$15,831,408	$21,949,678	$33,035,113	$26,377,120	$134,865,988	$94,814,199
Projects Authorized prior to 07/01/2000	34,600,000	0	0	0	0	0	0	34,600,000	0
	$50,391,586	$12,418,163	$9,462,920	$15,831,408	$21,949,678	$33,035,113	$26,377,120	$169,465,988	$94,814,199
Total All Projects (Sum of Exhibits 4.1 and 4.2)	$172,418,269	$14,401,079	$11,084,778	$16,456,455	$22,878,348	$35,450,375	$30,581,110	$303,270,414	$116,256,637

Exhibit 4.2

PROJECT APPROPRIATIONS

3. CSO Capital Improvement Projects

Per Section A.4. Requirement 3.

NOTE: All amounts are in (000's)	TOTAL PRIOR AUTH.	FY10	FY11	FY12	FY13	FY14	TOTAL
Initial Basic CSO Program	$0	$0	$0	$0	$0	$0	$0
Canoe Run to Mayo's	17,866	0	0	0	0	0	17,866
42nd Street to Canoe Run	12,204	0	0	0	0	0	12,204
Park Hydro to Shockoe	23,420	0	0	0	0	0	23,420
Hampton Street Retention Tunnel	51,500	0	0	0	0	0	51,500
Swirl Concentrators	1,840	0	0	0	0	0	1,840
Shockoe Retention	11,100	3,000	0	0	0	0	14,100
Sludge Storage	3,950	0	0	0	0	0	3,950
Sludge Grit Removal	1,750	0	0	0	0	0	1,750
Ammonia Removal	7,600	0	0	0	0	0	7,600
Canal Project	26,466	0	0	0	0	0	26,466
River Monitoring	1,400	0	0	0	0	0	1,400
CSO Re-Evaluation Study	1,475	0	0	0	0	0	1,475
CSO Phase III PPP	1,005	0	0	0	0	0	1,005
CSO Phase III-1 Regulators 24,25,26	4,408	0	0	0	0	0	4,408
CSO Phase III-2 Fulton Separation	1,625	0	0	0	0	0	1,625
CSO Phase III-2 Maury Separation	2,250	1,000	0	0	0	0	3,250
CSO Phase III-2 Orl. & Nich. Separation	1,800	0	0	0	0	0	1,800
CSO Phase III-3 Regulator 12, 14, 39	919	331	1,100	6,300	0	0	8,650
CSO Phase III-4 Lower Gillies Design	3,357	0	0	0	0	0	3,357
CSO Phase III-5 Oakwood In-Line Storage	500	0	2,000	0	0	0	2,500
Shockoe Diversion Structure	2,323	977	0	0	0	0	3,300
Total	$178,758	$5,308	$3,100	$6,300	$0	$0	$193,466

Section A.4.4: This section requires the City to prepare "a narrative report of the status of each CSO project identified in the LTCP including projected completion dates contingent upon funding availability". The City's Long-Term Control Plan (LTCP) components of the CSO Control Plan E are described in the following table:

PROJECTS	DESCRIPTION	Milestone Dates	Status	Projected Completion Date Contingent on Funding Availability
CSO Disinfection Study	Determines the most cost effective method of disinfecting CSO discharges at the Shockoe retention basin and the City's WWTP	Due to DEQ June 30 2005	This report was submitted to DEQ on June 30 2005. The report was approved by DEQ on November 29 2005.	June 30, 2005
Phase III Program Project Plan	Develops program project plan(s) for implementing the elements of the CSO Control Plan E.	Due to DEQ December 31 2006	The Phase III Program Project Plan (PPP) submitted to DEQ on January 3, 2007 (first business day following Sunday, December 31, 2006). The PPP report was approved by DEQ on May 9, 2007.	December 31, 2006

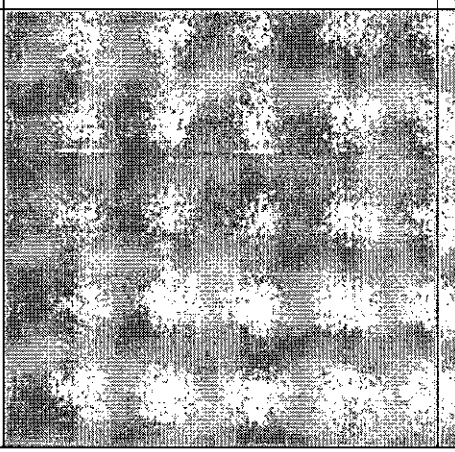
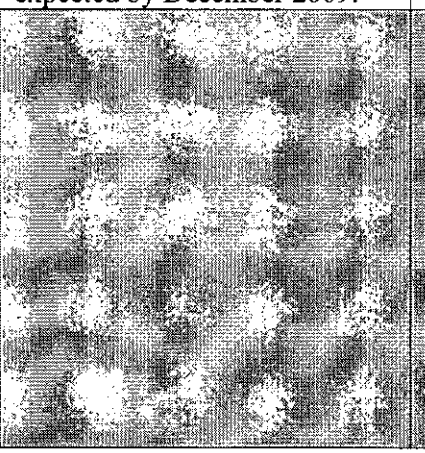
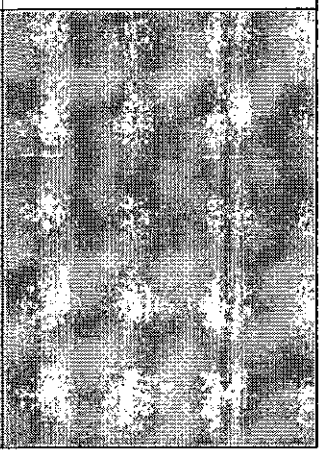
PROJECTS	DESCRIPTION	Milestone Dates	Status	Projected Completion Date Contingent on Funding Availability
Solids and Floatable Control Regulator for CSO Outfall No. 024	Provides solids and floatables treatment for CSO Outfall 024 prior to discharge to Gillies Creek and the James River. Part of the project for Solids and Floatable Control Regulators (#III-7) in the City's Long Term Control Plan.	• Submit Preliminary Design Report June 30 2005 • Submit Final Design to DEQ 6 months after DEQ approval of PDR. • Complete construction 20 months after DEQ approval of Final Design. • Place unit into operation 30 days after construction is complete.	PDR submitted to DEQ on 30 June 2005 and additional copies submitted on 14 October 2005. The PDR was approved by DEQ on November 29 2005. The final design was submitted to DEQ on May 25 2006. The final design was approved by DEQ on June 26 2006. The City issued Notice to Proceed to the construction contractor on June 25, 2007. CSO 24 Regulator was operational on February 27, 2008 and substantially complete on March 31, 2008.	PDR: June 30, 2005 Design: May 25, 2006 Construction: March 31, 2008

PROJECTS	DESCRIPTION	Milestone Dates	Status	Projected Completion Date Contingent on Funding Availability
Solids and Floatable Control Regulator for CSO Outfall No. 026	Provides solids and floatables treatment for CSO Outfall 026 prior to discharge to Gillies Creek and the James River. Part of the project for Solids and Floatable Control Regulators (#III-7) in the City's Long Term Control Plan.	• Submit Preliminary Design Report June 30 2005 • Submit Final Design to DEQ 6 months after DEQ approval of PDR. • Complete construction 20 months after DEQ approval of Final Design. • Place unit into operation 30 days after construction is complete.	PDR submitted to DEQ on 30 June 2005 and additional copies submitted on 14 October 2005. The PDR was approved by DEQ on November 29 2005. The final design was submitted to DEQ on May 25 2006. The final design was approved by DEQ on June 26 2006. The City issued Notice to Proceed to the construction contractor on June 25, 2007. CSO 26 Regulator was operational on April 15, 2008 and substantially complete on May 12, 2008.	PDR: June 30, 2005 Design: May 25, 2006 Construction: May 12, 2008
Solids and Floatable Control Regulator for CSO Outfall No. 025	Provides solids and floatables treatment for CSO Outfall 025 prior to discharge to Gillies Creek and the James River. Part of the project for Solids and Floatable Control Regulators (#III-7) in the City's Long Term Control Plan.	• Submit Preliminary Design Report June 30 2005 • Submit Final Design to DEQ 6 months after DEQ approval of PDR. • Complete construction 20 months after DEQ approval of Final Design. • Place unit into operation 30 days after construction is complete.	PDR submitted to DEQ on 30 June 2005 and additional copies submitted on 14 October 2005. The PDR report was approved by DEQ's PRO on November 29 2005. The final design was submitted to DEQ on June 26 2006. The final design was approved by DEQ on June 26 2006. The City issued Notice to Proceed to the construction contractor on June 25, 2007. CSO 25 Regulator was operational on February 27, 2008 and substantially complete on April 24, 2008.	PDR: June 30, 2005 Design: May 25, 2006 Construction: April 24, 2008

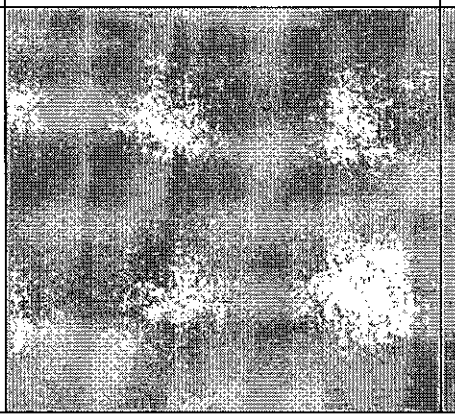
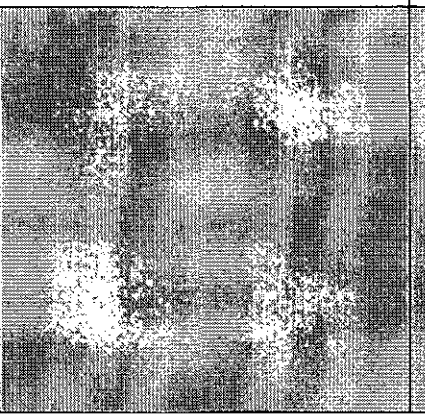
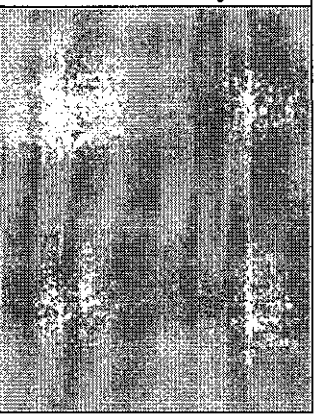
PROJECTS	DESCRIPTION	Milestone Dates	Status	Projected Completion Date Contingent on Funding Availability
Fulton Bottom Urban Renewal Separation Project	Separates combined sewers into separate sewers for the conveyance of sanitary sewage and storm water to eliminate discharges of combined sewer overflows from this CSO area into Gillies Creek and the James River. Part of the project for Separation of Select CSO Basins (#III-5) in the City's Long Term Control Plan.	• Submit Preliminary Design Report 3 months after DEQ approval of the Phase III Program Project Plan • Submit Final Design to DEQ 6 months after DEQ approval of PDR. • Complete construction 36 months after DEQ approval of Final Design. • Place unit into operation 30 days after construction is complete.	PDR submitted to DEQ on August 9, 2007. The PDR report was approved by DEQ's PRO on August 21, 2007. Final plans and specification provided to DEQ PRO on February 21, 2008 and approved by DEQ PRO on March 19, 2008. Project scheduled to bid in November 2009. Anticipate beginning construction in Feb/Mar 2010.	PDR: August 9, 2007 Design: February 21, 2008 Construction: December 2010
Maury Street Separation Project	Separates combined sewers into separate sewers for the conveyance of sanitary sewage and storm water to eliminate discharges of combined sewer overflows from this CSO area into the James River. Part of the project for Separation of Select CSO Basins (#III-5) in the City's Long Term Control Plan.	• Submit Preliminary Design Report 3 months after DEQ approval of the Phase III Program Project Plan • Submit Final Design to DEQ 6 months after DEQ approval of PDR. • Complete construction 48 months after DEQ approval of Final Design. • Place unit into operation 30 days after construction is complete.	PDR submitted to DEQ on August 9, 2007. The PDR report was approved by DEQ's PRO on August 21, 2007. The final design is being prepared. Final plans and specification provided to DEQ PRO on February 21, 2008 and approved by DEQ PRO on March 19, 2008. Project scheduled to bid in November 2009. Anticipate beginning construction in Feb/Mar 2010.	PDR: August 9, 2007 Design: February 21, 2008 Construction: December 2010

PROJECTS	DESCRIPTION	Milestone Dates	Status	Projected Completion Date Contingent on Funding Availability
Orleans and Nicholson Street Separation Project	Separates combined sewers into separate sewers for the conveyance of sanitary sewage and storm water to eliminate discharges of combined sewer overflows from this CSO area into the James River. Part of the project for Separation of Select CSO Basins (#III-5) in the City's Long Term Control Plan.	• Submit Preliminary Design Report 3 months after DEQ approval of the Phase III Program Project Plan • Submit Final Design to DEQ 6 months after DEQ approval of PDR. • Complete construction 60 months after DEQ approval of Final Design. • Place unit into operation 30 days after construction is complete.	PDR submitted to DEQ on August 9, 2007. The PDR report was approved by DEQ's PRO on August 21, 2007. Final plans and specification provided to DEQ PRO on February 21, 2008. Project funded under ARRA/VCWRLF. Construction commenced on November 9, 2009.	PDR: August 9, 2007 Design: February 21, 2008 Construction: June 2011 (perhaps sooner depending on schedule of private redevelopment project)
Peripheral In-Line Flow Equalization at Oakwood	Captures and stores combined sewage in excess of the capacity of existing conveyance system, and conveys it to the WWTP once the conveyance and treatment capacities are restored. It attenuates peak combined sewer flows, provides a relatively constant flow into the WWTP and thus reduces the size and cost of treatment facilities.	• Submit Preliminary Design Report 3 months after DEQ approval of the Phase III Program Project Plan • Submit Final Design to DEQ 6 months after DEQ approval of PDR. • Complete construction 72 months after DEQ approval of Final Design. • Place unit into operation 30 days after construction is complete.	PDR submitted to DEQ on August 9, 2007. The PDR report was approved by DEQ's PRO on August 17, 2007. The final design is being prepared. Final plans and specification provided to DEQ PRO on February 19, 2008. Project funded under ARRA/VCWRLF. Construction commenced on November 30, 2009.	PDR: August 9, 2007 Design: February 19, 2008 Construction: December 2010

PROJECTS	DESCRIPTION	Milestone Dates	Status	Projected Completion Date Contingent on Funding Availability
Solids and Floatable Control Regulator for CSO Outfall No. 012	Provides solids and floatables treatment for CSO Outfall 012 prior to discharge to Almond Creek and the James River. Part of the project for Solids and Floatable Control Regulators (#III-7) in the City's Long Term Control Plan.	• Submit Preliminary Design Report 3 months after DEQ approval of the Phase III Program Project Plan • Submit Final Design to DEQ 6 months after DEQ approval of PDR. • Complete construction 84 months after DEQ approval of Final Design. • Place unit into operation 30 days after construction is complete	PDR submitted to DEQ on August 9, 2007. The PDR report was approved by DEQ's PRO on August 17, 2007. The final design is being prepared. Final plans and specification provided to DEQ PRO on February 19, 2008. Project funded under ARRA/VCWRLF. Construction commenced on November 30, 2009.	PDR: August 9, 2007 Design: February 19, 2008 Construction: December 2010
Solids and Floatable Control Regulator for CSO Outfall No. 014	Provides solids and floatables treatment for CSO Outfall 014 prior to discharge to Manchester Canal and the James River. Part of the project for Solids and Floatable Control Regulators (#III-7) in the City's Long Term Control Plan.	• Submit Preliminary Design Report 3 months after DEQ approval of the Phase III Program Project Plan • Submit Final Design to DEQ 6 months after DEQ approval of PDR. • Complete construction 96 months after DEQ approval of Final Design. • Place unit into operation 30 days after construction is complete	PDR submitted to DEQ on August 9, 2007. The PDR report was approved by DEQ's PRO on August 17, 2007. The final design is being prepared. Final plans and specification provided to DEQ PRO on February 19, 2008.	PDR: August 9, 2007 Design: February 19, 2008 Construction: December 2015

PROJECTS	DESCRIPTION	Milestone Dates	Status	Projected Completion Date Contingent on Funding Availability
Solids and Floatable Control Regulator for CSO Outfall No. 039	Provides solids and floatables treatment for CSO Outfall 039 prior to discharge to Gillies Creek and the James River. Part of the project for Solids and Floatable Control Regulators (#III-7) in the City's Long Term Control Plan.	• Submit Preliminary Design Report 3 months after DEQ approval of the Phase III Program Project Plan • Submit Final Design to DEQ 6 months after DEQ approval of PDR. • Complete construction 108 months after DEQ approval of Final Design. • Place unit into operation 30 days after construction is complete	PDR submitted to DEQ on August 9, 2007. The PDR report was approved by DEQ's PRO on August 17, 2007. The final design is being prepared. Final plans and specification provided to DEQ PRO on February 19, 2008 and approved on March 14, 2008. Construction bids received on October 15, 2008. Construction commenced on April 20, 2009. Substantial completion expected by December 2009.	PDR: August 9, 2007 Design: February 19, 2008 Construction: December 2009
Lower Gillies Creek Conveyance System Project	Conveys combined sewer flows from the lower portion of the Gillies Creek CSO district to WWTP, and control these CSOs to 4 overflows per year. Conveys combined sewer flows from CSO Outfall 034 to Shockoe Retention Basin to reduce discharges of combined sewer overflows from this CSO area into the James River.			

PROJECTS	DESCRIPTION	Milestone Dates	Status	Projected Completion Date Contingent on Funding Availability
Wet Weather Flow Improvements at the WWTP: Solids Removal Improvements Project	Upgrades the primary treatment facilities to provide reliable treatment of up to 140 MGD wet weather flow; upgrades solids handling facilities to handle an increased solids loading associated with the increased CSO wet weather flow treatment.			
Wet Weather Flow Improvements at the WWTP: Wet Weather Disinfection Facilities Project	Maximizes the wet weather treatment capacity to 300 MGD at WWTP; controls Gordon Avenue (CSO 021) outfall to 4 overflows per year. Upgrades the coarse screens, primary grit removal facilities, Main Pumping Station, and fine screens to provide reliable treatment of up to 300 MGD wet weather flow; Constructs a new wet weather disinfection facility at WWTP to treat flows up to 215 MGD (55 MGD primary effluent plus 160 MGD wet weather flow)			

PROJECTS	DESCRIPTION	Milestone Dates	Status	Projected Completion Date Contingent on Funding Availability
Wet Weather Flow Improvements at the WWTP: Expand Secondary Wet Weather Flow Treatment Project	Installs sedimentation enhancing technologies such as inclined plate settlers in the Final Sedimentation Tanks to increase the solids capture efficiency for up to 85 MGD wet weather flow; upgrades the return sludge and sludge withdrawals to increase the capacity of this facility.			

PROJECTS	DESCRIPTION	Milestone Dates	Status	Projected Completion Date Contingent on Funding Availability
Shockoe Retention Basin: Adapt Existing Basin for Pass Through Wet Weather Flow Project	Modifies Shockoe Diversion Structures, including trash rack improvement, solids removal and cleaning of Shockoe retention basin and diversion structure; Reconfigures aeration piping; Modifies retention basin bottom to slope to drain gates; Provides potential flushing system to clean the retention basin and diversion structures after every storm event.			
Shockoe Retention Basin: Shockoe Retention Basin 15 MG Expansion Project	Expands the Shockoe Retention Basin by 15 MG; Provides flushing system; Relocates outfall to east end of retention basin; Provides access for servicing and mechanically cleaning the retention basin.			
Shockoe Retention Basin: Shockoe Wet Weather Disinfection Facility Project	Provides disinfection for the new Shockoe outfall CSOs to decrease bacterial loading to the James River by an 80% event mean reduction			

Section A.4.5. This section requires the City to prepare "a status report of progress being made in procuring state and federal grants and low interest loans for the purpose of implementing specific elements of the LTCP". The City's progress report on procuring grants and low interest loans is summarized in the following table:

Program Area	Grants			Loans	
	Virginia	EPA	Army Corps of Engineers	Virginia Clean Water Revolving Loan Fund	Other
Combined Sewer Overflow (CSO), Combined Sewer System (CSS)	• Environmental Financial and Technical Assistance Grants: • FY 06: $2,000,000.00 • FY 07: $3,750,000.00 • FY 08: $3,050,000.00 • FY 09: $1,500,000.00	• EPA FY 2003 & 2004 Appropriations Act Grant for the City of Richmond CSO Program $1,638,700.00	• FY2008 Consolidated Appropriations Act (Public Law 110-161): $280,000 for the Richmond CSO Design/Studies (required a $93,000 City match)	• FY 2007: Shockoe CSO Retention Basin Access Ramp $4,316,181.00 • FY 2010 (ARRA): CSO 002 Orleans St Separation $326,920, CSO 012 Regulator $836,000, CSO 031 Oakwood In-Line Equalization $1,558,700	•
Wastewater Treatment Facility	•	•	• FY2006 Energy and Water Appropriations (Public Law 109-103) signed by the President on November 19, 2005: $750,000 for the Richmond CSO (required a $250,000 City match)	• FY 2006: Primary and secondary sedimentation tanks $11,000,000.00. •	•
Wastewater Collection System (Pumping and Separate Sanitary Sewer System)	•	•	•	• FY 2007: Gambles Hill $2,583,819.00	•

Chesapeake Bay / James River Tributary Strategy Nitrogen and Phosphorus Control	• Water Quality Improvement Fund Technical Assistance Grant approved by DEQ for $45,674,244.00 (to be adjusted based on actual construction costs)	•	•	• FY 2008 - $22,000,000.00 • FY 2009 - $10,000,000.00	•